University of Florida
College of Public Health & Health Professions Syllabus
OTH 4418 Nervous System and Disorders (5 credit hours)
Fall 2016
Delivery Format: On-Campus and Blended
Lecture in HPNP G-101; Lab in CG-22 / E-learning on CANVAS

Instructor Name:
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Teaching Assistants:
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2. Lauren Hew:

Office: HPNP room 2169
Office hours: Wednesdays 4-5 PM or by appointment

Preferred Course Communications: email

Prerequisites: anatomy and physiology

Lecture: (section 0927) HPNP room G-101; Monday 1:55 – 3:50 and Tuesday 1:55-2:45
Lab: HSC room CG-22; Wednesdays: 9:35–11:30, 11:45–1:40, 1:55–3:50

PURPOSE AND OUTCOME

Course Overview:

The purpose of this course is to provide the student with lecture and laboratory study of human nervous system. The course is designed for occupational therapy (OT) and other health science students and is focused on pertinent material including neuroanatomy, neurophysiology, and disorders of the human nervous system. Emphasis is put on the relationship between structure and function in the nervous system. Understanding the normal nervous system functioning is a starting point for comprehending various disorders of the nervous system. A key goal of this course is to provide students with sufficient knowledge for engaging in clinical problem solving, by applying neurophysiological and neuroanatomical principles to case studies of neurological disorders.

Relation to Program Outcomes:

This course is required for pre-OT students and Post-Baccalaureate students as part of a series of pre-requisite basic science courses. These courses must be taken before entering the UF-MOT program. Additionally, this is an elective course for Senior students in the BHS program.

Course Objectives and/or Goals

This course partially meets one of the Education Standards for the American Council for the Accreditation of OT Education (ACOTE). The student will:

B.1.4 Demonstrate knowledge and understanding of the structure and function of the human body to include the biological and physical sciences. Course content must include, but is not limited to, biology, anatomy, physiology, neuroscience, and kinesiology or biomechanics.

More specifically, based on study materials, readings, lectures, and handouts the student will:

A. Lecture (neuroanatomy, neuroanatomy, and integrating structure & function)
   1. Describe basic concepts, terminology and divisions of the nervous system.
   2. Describe the organization, structure and function of the cerebrum, diencephalon, limbic

structures, basal ganglia, cerebellum, brain stem, cranial nerves, spinal cord, and peripheral nerves.
3. Define terms and describe the cytology of the nervous system
4. Define terms and describe conduction and transmission of nerve impulse as well as excitation and inhibition.
5. Trace and describe the flow of blood and cerebrospinal fluid of the brain and spinal cord.
6. Define terms and describe neurodevelopment.
7. Identify structures and describe the organization and function of sensory systems including the somatosensory, vestibular, visual and auditory systems.
8. Identify structures and describe the organization and function of the motor systems and the control of posture and movement.
9. Identify structures and describe the organization and function of the autonomic nervous system and the limbic system.
10. Integrate the information of structure and function as well as dysfunction of the nervous system by applying knowledge of brain anatomy and Brodmann's areas to cortical functions in the various areas and lobes and infer the disorders related to the various neurological structures.

B. Brain (neuroanatomy) lab: Identify basic structure and function of the brain and spinal cord:
11. Identify structures and describe their functions; including: the cerebrum, diencephalon, cerebellum, brain stem & cranial nerves, and spinal cord & spinal nerves.
12. Identity vascular and ventricular structures, trace blood and CSF flow in the brain and spinal cord.

C. Disorders lab objectives: integrate the knowledge of normal anatomy and physiology to understand the nature of various injuries, conditions and disorders of the nervous system.
13. Identify laboratory procedures and physician's examination used in neurodiagnosis.
14. Describe the etiology, symptoms, signs and treatment of major neurological diseases, disorders, and dysfunctions.
15. Relate specific disorders to the neurological structures studied in the brain labs.
16. Differentiate between various disorders given known signs and symptoms.
17. Compare and contrast between different lesions based on their location in the brain.

Instructional Methods

The students will participate in lecture and in laboratory study of specimen & models as well as case studies of neurological disorders. All lab material and some lecture material is delivered using blended learning for which students watch pre-recorded lectures **prior** to lab and/or lecture and must come prepared for class.

Blended Learning

What is blended learning and why is it important?

A Blended Learning class uses a mixture of technology and face-to-face instruction to help you maximize your learning. Knowledge content that, as the instructor, I would have traditionally presented during a live class lecture is instead provided online before the live class takes place. This lets me focus my face-to-face teaching on course activities designed to help you strengthen higher order thinking skills such as critical thinking, problem solving, and collaboration. Competency in these skills is critical for today's health professional.

What is expected of you?

You are expected to actively engage in the course throughout the semester. You must come to class prepared by completing all out-of-class assignments. This preparation gives you the knowledge or practice needed to engage in higher levels of learning during the live class sessions. If you are not prepared for the face-to-face sessions, you may struggle to keep pace with the activities occurring in the live sessions, and it is unlikely that you will reach the higher learning goals of the course. Similarly, you are expected to actively participate in the live class. Your participation fosters a rich course experience for you and your peers that facilitates overall mastery of the course objectives.

DESCRIPTION OF COURSE CONTENT

Topical Outline/Course Schedule: see detailed schedule information at the end of this document!

Week	Date(s)	Topic(s)
1	8/22 – 8/24	Introduction, Levels of CNS Function, Cerebrum
2	8/29 – 8/31	Cytology and nerve conduction; Lab: Cerebrum
3	9/5 – 9/7	Cytology and nerve conduction; Lab: Coronals
4	9/12 – 9/14	Segments of the Neuron; Lab: Blood Supply & Ventricles
5	9/19 – 9/21	Blood Supply and CSF; Lab: Brainstem & Cranial Nerves
6	9/26 – 9/28	Basal ganglia; **Lecture Exam (Exam 1)**; Lab: Cerebellum & Spinal Cord
7	10/3 – 10/5	Neurodevelpment, Cerebellum & spinal cord function; **Brain Lab Exam**
8	10/10 – 10/12	Functional Components; Lab: Tumors & Infections of the CNS
9	10/17 – 10/19	Spinal reflexes; Lab: Neurodiagnosis & Congenital Disorders
10	10/24 – 10/26	Motor system; Lab: Cerebellar & Degenerative Disorders
11	10/31 – 11/2	Somatosensory system; Lab: Peripheral & Cranial Nerve Disorders
12	11/7 – 11/9	Vestibular System; Lab: Spinal Cord Injury (SCI)
13	11/14 – 11/16	Auditory system, **Lecture Exam (Exam 3)**; Lab: CVA & TBI
14	11/21 – 11/23	Visual system; Thanksgiving
15	11/28 – 11/30	Visual system, Limbic system; Lab: Integration: Structure and Function
16	12/5 – 12/7	Autonomic system, Cortical Functions; **Disorders Lab Exam (Exam 4)**
17	12/12	**Final Exam 5 (cumulative)**

Course Materials and Technology

A. Required:

1. Class notes will be posted weekly on-line (E-learning at https://lss.at.ufl.edu/).
2. Haines D.E. Neuroanatomy: An atlas of structures, sections and systems (Latest Edition). Williams and Wilkins, Baltimore, MD.
3. TopHat classroom response system will be used in class. You must have access to it. Direct URL: http://app.tophat.com/e/486401; The 6-digit course code is: 486401.

B. Recommended (optional):

1. Cohen, H. Neuroscience for Rehabilitation (Newest Edition). Philadelphia: Lippincott Williams & Wilkins.
2. Lundy-Ekman, L. Neuroscience: Fundamentals for Rehabilitation. (Newest Edition). Philadelphia: W.B. Saunders Co.

For technical support for this class, please contact the UF Help Desk at:

- Learning-support@ufl.edu
- (352) 392-HELP - select option 2
- https://lss.at.ufl.edu/help.shtml

ACADEMIC REQUIREMENTS AND GRADING

Assignments

- Quizzes: there is a quiz before each lab as well as online quizzes.
- Exams: there are 2 lecture exams, two lab exams, and a cumulative final exam.

Grading

Item	Date	Number of questions	Points per Question	Points per Test	% Grade
Exam 1: Lecture	9/29	60	2.5	150	15.0
Exam 2: Lab	10/7	70	1	70	7.0
Exam 3: Lecture	11/17	60	2.5	150	15.0
Exam 4: Disorders	12/9	70	1	70	7.0
Exam 5: Final (cumulative)	12/14	100	2.5	250	25.0
Online (Lecture) quizzes	Various	Variable	Variable	170	17.0
Brain Lab quizzes	Every lab	Variable	Variable	50	5.0
Disorder Lab quizzes	Every lab	Variable	Variable	70	7.0
Professional Behavior				20	2.0
Total Points				**1000**	100.0

* Professional points are based on attendance:

- Unexcused absences from lab result in subtracting 5 points per missed lab. In addition, lab quizzes are given at the beginning of lab, so if you are late for lab you will NOT be able to make up the quiz.
- Unexcused absences from lecture result in subtracting 2 points per missed lecture. Attendance will be randomly taken based on Top Hat participation.

Point system used (i.e., how do course points translate into letter grades).

Points earned	930-1000	900-929	870-899	830-869	800-869	770-799	700-769	670-699	630-669	600-629	0-599
Letter Grade	A	A-	B+	B	B-	C+	C	D+	D	D-	E

According to the College policy, a grade of "C" (700 points or more) is necessary to pass the course for students who take this as a required course or College elective!

Letter grade to grade point conversions are fixed by UF and cannot be changed.

Letter Grade	**A**	**A-**	**B+**	**B**	**B-**	**C+**	**C**	**D+**	**D**	**D-**	**E**	**WF**	**I**	**NG**	**S-U**
Grade Points	4.0	3.67	3.33	3.0	2.67	2.33	2.0	1.33	1.0	0.67	0.0	0.0	0.0	0.0	0.0

For greater detail on the meaning of letter grades and university policies related to them, see the Registrar's Grade Policy regulations at: http://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

Exam Policy

Lecture exams and disorders lab exam will be administered in the Computer Testing Center in the Communicore Building room CG-27/28. Brain Lab exam will be administered in the lab (Communicore Building room CG-22). You must arrive on time for all exams.

Policy Related to Make up Exams or Other Work

Makeup exams will not be given without prior arrangements with the Course Instructor. "Prior" means at least one day in advance. Failure to do this will result in a zero grade for that test or assignment. Emergencies have to be documented (such as a medical exemption). Undocumented absence from an exam or an assignment will result in a score of "0" on that assignment. Makeup exams that are given due to authorized absence may be oral exams.

Policy Related to Required Class Attendance

- Students are expected to attend lecture. A sign-up sheet will be passed around on randomly selected dates. Missing lecture will result in subtracting 2 points per lecture.
- Students must attend lab! Attendance will be taken in each and every lab. Missing a lab will result in subtracting 5 points per missed lab. In addition, the student will lose lab quiz points.
- Missing class or lab without **prior** arrangements (for definition of "prior" see above) will result in point subtraction as mentioned above. Personal issues regarding attendance or fulfillment of course requirements will be handled on an individual basis.
- All faculty members are bound by the UF policy for excused absences. For information regarding the UF Attendance Policy see the Registrar website for additional details: https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

STUDENT EXPECTATIONS, ROLES, AND OPPORTUNITIES FOR INPUT

Expectations Regarding Course Behavior

1. **Preparation for class:** To maximize the use of class time, you are expected to:
   - Look at E-learning for announcements and get the notes prior to **each** class.
   - Read and study assigned readings prior to class.

2. **Class behavior:** You are also expected to:
   - Be on time for class
   - Stay until class is dismissed
   - Silence your cellular phone
   - Be courteous by refraining from chatter and other distracting behaviors
   - Do not look at external material during class (newspaper, Facebook, twitter, etc.)
   - Arrange with the instructor in advance if you cannot attend class so you can get pertinent handouts and announcements

3. **Specific Behavior in Lab:**
   a. **Brain Lab:**
      1) Preparation for Lab: blended learning: students are expected to come prepared to lab by watching a pre-recorded lecture on specific structures (which will be posted on E-learning) before coming to lab. There will be a 10 question quiz at the beginning of each lab.
      2) Lab attire: Students must wear scrubs or a lab coat and close toed shoes (no sandals). Students must bring gloves to lab (nitrile, vinyl or latex). Wooden probes will be provided.
      3) Use of laboratory materials: Neural specimens are very fragile and must be handled with care. Specimen must not be allowed to dry out. Do not use water!! Only use the Biostat fluid. Wet a paper towel to cover parts of specimen when out of the buckets for an extended period of time. *Do not poke the specimen with a pencil or pen! Gently* touch with a wooden probe.
      4) Lab clean-up: Students are expected to clean up after themselves in lab and return all lab materials to their proper place. *Students are not to remove atlases, models, specimen or other lab materials from the classroom.*
   b. **Disorders Lab:**
      1) Preparation for Disorders Lab: blended learning: students are expected to independently study the material and come prepared to participate in lab, including discussion and solution of case studies ("identify the lesion" lab exercises). Specific materials for lab are posted on E-learning. Preparation includes both reading the posted material and watching a pre-recorded lecture. There will be a 5 -10 question quiz at the beginning of each lab.

Communication Guidelines

Please email the instructors and TAs directly (email addresses are above) rather than using the E-learning. For digital communication expectations see: *Netiquette Guidelines:* http://teach.ufl.edu/wp-content/uploads/2012/08/NetiquetteGuideforOnlineCourses.pdf

Academic Integrity

Students are expected to act in accordance with the University of Florida policy on academic integrity. As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge:

"**We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity**."

You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied:

"On my honor, I have neither given nor received unauthorized aid in doing this assignment."

It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For additional information regarding Academic Integrity, please see Student Conduct and Honor Code or the Graduate Student Website for additional details:
https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/
http://gradschool.ufl.edu/students/introduction.html

Please remember cheating, lying, misrepresentation, or plagiarism in any form is unacceptable and inexcusable behavior.

Online Faculty Course Evaluation Process

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at https://evaluations.ufl.edu. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at https://evaluations.ufl.edu/results/.

Inclusive Learning Environment

Public health and health professions are based on the belief in human dignity and on respect for the individual. As we share our personal beliefs inside or outside of the classroom, it is always with the understanding that we value and respect diversity of background, experience, and opinion, where every individual feels valued. We believe in, and promote, openness and tolerance of differences in ethnicity and culture, and we respect differing personal, spiritual, religious and political values. We further believe that celebrating such diversity enriches the quality of the educational experiences we provide our students and enhances our own personal and professional relationships. We embrace The University of Florida's Non-Discrimination Policy, which reads, "The University shall actively promote equal opportunity policies and practices conforming to laws against discrimination. The University is committed to non-discrimination with respect to race, creed, color, religion, age, disability, sex, sexual orientation, gender identity and expression, marital status, national origin, political opinions or affiliations, genetic information and veteran status as protected under the Vietnam Era Veterans' Readjustment Assistance Act." If you have questions or concerns about your rights and responsibilities for inclusive learning environment, please see your instructor or refer to the Office of Multicultural & Diversity Affairs website:
www.multicultural.ufl.edu

SUPPORT SERVICES

Accommodations for Students with Disabilities

If you require classroom accommodation because of a disability, you must register with the Dean of Students Office http://www.dso.ufl.edu within the first week of class. The Dean of Students Office will provide documentation of accommodations to you, which you then give to me as the instructor of the course to receive accommodations. Please make sure you provide this letter to me by the end of the second week of the course. The College is committed to providing reasonable accommodations to assist students in their coursework.

Counseling and Student Health

Students sometimes experience stress from academic expectations and/or personal and interpersonal issues that may interfere with their academic performance. If you find yourself facing issues that have the potential to or are already negatively affecting your coursework, you are encouraged to talk with an instructor and/or seek help through University resources available to you.

- The Counseling and Wellness Center 352-392-1575 offers a variety of support services such as psychological assessment and intervention and assistance for math and test anxiety. Visit their web site for more information: http://www.counseling.ufl.edu. On line and in person assistance is available.
- You Matter We Care website: http://www.umatter.ufl.edu/. If you are feeling overwhelmed or stressed, you can reach out for help through the You Matter We Care website, which is staffed by Dean of Students and Counseling Center personnel.
- The Student Health Care Center at Shands is a satellite clinic of the main Student Health Care Center located on Fletcher Drive on campus. Student Health at Shands offers a variety of clinical services. The clinic is located on the second floor of the Dental Tower in the Health Science Center. For more information, contact the clinic at 392-0627 or check out the web site at: https://shcc.ufl.edu/
- Crisis intervention is always available 24/7 from:
  Alachua County Crisis Center
  (352) 264-6789
  http://www.alachuacounty.us/DEPTS/CSS/CRISISCENTER/Pages/CrisisCenter.aspx

Do not wait until you reach a crisis to come in and talk with us. We have helped many students through stressful situations impacting their academic performance. You are not alone so do not be afraid to ask for assistance.

DETAILED CLASS SCHEDULE

Note: this is a tentative schedule; content may be subject to change!

DATE	TOPIC	READING	Quiz
WEEK 1			
Monday, 8/22/2016	1. Introduction to the course 2. Basic concepts	Notes: Ch 1	
Tuesday, 8/23/2016	1. Levels of CNS function	Notes: Ch 2-1 Haines: Ch. 1-4	
Wednesday, 8/24/16 **Online Lecture (Chapter 2)**	1. Levels of CNS function (online lect.)	Notes: Ch 2-2 Haines: Ch. 2	Quiz1 due 8/28
WEEK 2			
Monday, 8/29/16	1. Cytology and nerve conduction	Notes: Ch 3-1	Quiz2 due
Tuesday, 8/30/16	1. Cytology and nerve conduction 2. Diencephalon and limbic (online lect.)	Notes: Ch 3-2 Notes: Ch 6	
Wednesday, 8/31/16 **Brain Lab 1**	Cerebrum: ventral, medial, & lateral aspects (online lab prep)	Notes: Ch 2 Haines: Ch. 2	BLQ1 (Brain Lab Quiz1)
WEEK 3			
Monday, 9/5/16	**Happy Labor Day (no class)**		
Tuesday, 9/6/16	1. Cytology and nerve conduction	Notes: Ch 3-3	Quiz3 due
Wednesday, 9/7/16 **Brain Lab 2**	1. Coronal sections (online lab prep)	Notes: Ch 4 Haines: pp 76-84	BLQ2
WEEK 4			
Monday, 9/12/16	1. Neurotransmitters (online lecture) 2. Segments of the neuron	Notes: Ch 3-6 Notes: Ch 3-4	Quiz4 due
Tuesday, 9/13/16	1. Segments of the neuron	Notes Ch 3-4	
Wednesday, 9/14/16 **Brain Lab 3**	1. Ventricular system (online lab prep) 2. Blood supply (online lab prep) 3. Meninges & Sinuses (online lab prep)	Notes: Ch 5 Haines: pp 17-27	BLQ3
WEEK 5			
Monday, 9/19/16	1. Inhibition and Excitation 2. Cerebral blood supply 3. Meninges, ventricles and CSF	Notes: Ch 3-5 Notes: Ch 5 Notes: Ch 5	Quiz5 due
Tuesday, 9/20/16	1. Meninges, ventricles and CSF	Notes: Ch 5	
Wednesday, 9/21/16 **Brain Lab 4**	1. Brainstem anatomy (online lab prep) 2. Cranial Nerves (online lab prep) 3. Intro to disorders lab	Notes: Ch. 5 Haines:20,22,30	BLQ4
WEEK 6			
Monday, 9/26/16	1. Basal Ganglia	Notes: Ch 7	
Tuesday, 9/27/16 **Exam 1: Lecture Exam**	**EXAM 1: Lecture; 1:45-3:15 pm** **CG-28 (Computer Testing Center)**		
Wednesday, 9/28/16 **Brain Lab 5**	1. Cerebellum anatomy (online lab prep) 2. Spinal Cord anatomy (online lab prep)	Notes: Ch. 9 & 10 Haines:8-10; 34-35	BLQ5

DATE	TOPIC	READING	Quiz
WEEK 7			
Monday, 10/3/16	1. Basal Ganglia (cont.) 2. Cerebellum - Function	Notes: Ch. 7 Notes: Ch. 10	
Tuesday, 10/4/16	1. Cerebellum - Functions 2. Neurodevelopment (online lecture)	Notes: Ch. 10 Notes: Ch. 12	
Wednesday,10/5/16 **Exam 2: Lab Exam**	**EXAM 2: Brain Lab Exam (In Brain Lab - Room CG-22 – During lab time)**	Notes: Ch. 9 & 10	
WEEK 8			
Monday, 10/10/16	1. Brainstem and Cranial Nerves 2. Spinal cord – Function	Notes: Ch. 8 Notes: Ch.10	Quiz6 due
Tuesday, 10/11/16	1. Functional Components	Notes: Ch. 9B & 10B	
Wednesday, 10/12/16 **Disorders Lab 1**	1. Tumors and Infections (online lab prep)	Notes: Ch. 1a+b	DLQ1 (Disorders Lab Quiz1)
WEEK 9			
Monday, 10/17/16	1. Functional Components 2. Spinal reflexes	Notes: Ch9B, 10B Notes: Ch11	Quiz7 due
Tuesday, 10/18/16	1. Spinal reflexes	Notes: Ch11	
Wednesday, 10/19/16 **Disorders Lab 2**	1. Congenital disorders (online lab prep) 2. Neurodiagnosis (online lab prep)	Notes: Ch. 2a+b	DLQ2
WEEK 10			
Monday, 10/24/16	1. Spinal Reflexes 2. Motor System	Notes: Ch.13 Notes: Ch.13	Quiz8 due
Tuesday, 10/25/16	1. Motor System	Notes:Ch.13	
Wednesday, 10/26/16 **Disorders Lab 3**	Cerebellar and Degenerative disorders (online lab prep)	Notes: Ch. 3a+b	DLQ3
WEEK 11			
Monday, 10/31/16	1. Motor system 2. Somatosensory system	Notes: Ch.13 Notes: Ch.14	Quiz9 due
Tuesday, 11/1/16	1. Somatosensory system	Notes: Ch14	
Wednesday, 11/2/16 **Disorders Lab 4**	Peripheral and Cranial Nerve Injuries (online lab prep)	Notes: Ch. 4a+b	DLQ4
WEEK 12			
Monday, 11/7/16	1. Somatosensory System 2. Vestibular system	Notes: Ch. 14 Notes: Ch. 15	Quiz10 due
Tuesday, 11/8/16	1. Vestibular system	Notes: Ch.15	
Wednesday, 11/9/16 **Disorders Lab 5**	Spinal cord injury (online lab prep)	Notes: Ch. 5	DLQ5
WEEK 13			
Monday, 11/14/16	1. Auditory System	Notes: Ch. 16	
Tuesday, 11/15/16 **Exam 3: Lecture Exam**	**EXAM 3: Lecture (No Disorders Lab Material) 1:45-3:15 Room CG-28 (CTC)**		
Wednesday, 11/16/16 **Disorders Lab 6**	CVA and TBI (online lab prep)	Notes: Ch. 6a+b	DLQ6

DATE	TOPIC	READING	Quiz
WEEK 14			
Monday, 11/21/16	1. Auditory system 2. Visual system	Notes:Ch.16 Notes:Ch.17	Quiz11 due
Tuesday, 11/22/16	3. Visual system	Notes:Ch.17	
Wednesday, 11/23/16	**Happy Thanksgiving - No Class**		
WEEK 15			
Monday, 11/28/16	1. Visual system	Notes:Ch17	
Tuesday, 11/29/16	1. Visual system 2. Limbic system	Notes:Ch17 Notes:Ch.18	
Wednesday, 11/30/16 **Structure & function lab**	Integration lab: Structure & function		Online Neuro-diagnosis Quiz due
WEEK 16			
Monday, 12/5/16	1. Autonomic system 2. Cortical Functions	Notes:Ch.19 Notes:Ch.20	
Tuesday, 12/6/16	1. Cortical Functions	Notes:Ch.20	
Wednesday, 12/7/16 **Exam 4: Disorders Lab**	**EXAM 4: Disorders Lab** **10:30 am - 12:15 pm CG-28 (CTC)**	**** Online Quiz12 is due. Hand it in before the Disorders Exam!**	Quiz12 due, bring to exam
WEEK 17			
Monday 12/12/16: **Exam 5: Final Exam**	**EXAM 5: FINAL (cumulative!)** **3:00 - 5:30 pm CG-28 (CTC)**		

Note: this is a tentative schedule; content may be subject to change!

List of On-Line Lecture Quizzes:

Quiz #	Quiz Name	Points
Quiz1	Anatomical Terminology (Ch1)	10
Quiz2	CNS Levels (Ch2)	10
Quiz3	Diencephalon and Limbic (Ch5)	10
Quiz4	Neutotransmitters (Ch3-6)	10
Quiz5	Segments of the Neuron (Ch304)	15
Quiz6	Neurodevelopment (Ch12)	11
Quiz7	Basal Ganglia and Cerebellum (Ch7,8)	15
Quiz8	Functional Components (Ch9B&10B)	15
Quiz9	Neuron chains (Ch13&14)	7
Quiz10	Spinal Reflexes (Ch11)	15
Quiz11	Anatomy of the Eye (Ch14)	20
Quiz12	Broadmann's Areas (Ch20)	20

******Note: this is a tentative quiz list; the date and point value of quizzes may be subject to change!***

HSC 4418: Nervous System and Disorders

Lab schedule – Fall, 2016

DETAILED LAB SCHEDULE

NEUROANATOMY LABS: Room CG-22

8/31: Lab 1: Cerebrum: (Quiz – 10 points)
1. Lateral aspect
2. Medial aspect
3. Ventral aspect

9/7: Lab 2: Coronals: (Quiz – 10 points)
1. Coronal sections

9/14: Lab 3: Ventricular system & cerebral blood flow: (Quiz – 10 points)
1. Ventricular system: models, medial aspect, coronal sections
2. Meninges: dura mater, arachnoid, Pia mater, falx cerebri, falx cerebelli, tentorium cerebelli
3. Arteries and Sinuses

9/21: Lab 4: Brainstem and Cranial nerves: (Quiz – 10 points)
1. Brainstem and Cranial nerves: model, ventral aspect, medial aspect

9/28: Lab 5: Cerebellum and Spinal Cord: (Quiz – 10 points)
1. Cerebellum: model, whole cerebellum, coronal sections, lateral, medial & ventral aspects.
2. Spinal Cord
3. Review for Lab exam and Practice Test

10/5: **Lab Exam**

Group	Time	Room
Lab 1	10:30 - 11:45	CG-22
Lab 2	12:00 - 1:15	CG-22
Lab 3	1:55 - 3:10	CG-22

DISORDERS LABS: (Room CG-22)

10/12: Lab 1 - Tumors and Infections (Quiz – 10 questions)

10/19: Lab 2 - Congenital Disorders (Quiz – 5 questions) and Neurodiagnosis (Online Quiz)

10/26 Lab 3 - Cerebellar and Degenerative Disorders (Quiz – 10 questions)

11/2: Lab 4 - Peripheral Nerve Injuries and Cranial Nerve Injuries (Quiz – 10 questions)

11/9: Lab 5 - Spinal Cord Injuries (Quiz – 5 questions)

11/16: Lab 6 - CVA and TBI (Quiz – 10 questions)

11/23: Thanksgiving Break

11/30: Lab 7 - Summary lab for structure and function

12/7: **Disorders Lab Exam (Exam 4) 10:30 am - 12:15 pm, CG-28 (Computer Testing Ctr.)**